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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,490	12/09/2003	Claudio Santiago Ribeiro	CS23471RL	4608

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MOTOROLA INC
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EXAMINER

LEE, JOHN J

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/731,490	RIBEIRO ET AL.	
	Examiner	Art Unit	
	JOHN J LEE	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 15-26, and 28 is/are rejected.
- 7) ☒ Claim(s) 8-14 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/9/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 7 is objected to because of the following informalities: the spelling of the word “arcuate” should be corrected to “arcade” or other corrected word. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-7, 15-26, and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong (US 2004/0209641) in view of Ballay et al. (US 2005/0085180).

Regarding **claim 1**, Hong discloses that a handheld wireless communication apparatus (Fig. 2 and pages 1, paragraphs 5 – 6). Hong teaches that a first input device (71 in Fig. 4) carried on said housing (Fig. 4) (Fig. 4 and pages 2, paragraphs 27, where teaches mobile phone has a housing including first input device). Hong teaches that a rotary shape input device (71 in Fig. 4) carried on said housing and adjacent to and encircling said first speaker device (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches mobile phone has a housing including a rotary shape input device carried on the housing and adjacent to and encircling the first speaker device). Hong teaches that a second input device (63 in Fig. 4) carried on said housing (50 in Fig. 4) (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches mobile phone has a housing including a second input device

carried on the housing). Hong teaches that a display (52 in Fig. 4) carried on said housing substantially in-between said rotary shape device (71 in Fig. 4) and said second input device (63 in Fig. 4) (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches mobile phone has a housing including a display device located between the rotary shape device and second input device). Hong teaches that a speaker (64, 72 in Fig. 4) carried in said housing adjacent to said second input device (63 in Fig. 4) (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches mobile phone has a housing including speaker located adjacent to the second input device).

Hong does not specifically disclose the limitation “a rotary input device carried on said housing and adjacent to and encircling said first input device”. However, Ballay discloses the limitation “a rotary input device carried on said housing and adjacent to and encircling said first input device” (Fig. 5 and pages 5, paragraphs 78 – pages 6, paragraphs 84, where teaches the housing having a rotary input device located adjacent to the encircling the input device). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Hong structure as taught by Ballay, provide the motivation to achieve an enhancing mobile service for efficient controlling input device in the wireless communication device.

Regarding **claim 2**, Hong discloses that the housing is an elongated housing, having a long dimension and a short dimension (Fig. 2, 4 and pages 1, paragraphs 25 – pages 2, paragraphs 31, where teaches mobile phone has a housing having a long and short dimension).

Regarding **claim 3**, Hong and Ballay disclose all the limitation, as discussed in claim 1. Furthermore, Hong further discloses that the rotary shape input device, said display, and said second input device are aligned substantially linearly along said long dimension of said elongated housing (Fig. 4 and pages 1, paragraphs 25 – pages 2, paragraphs 31, where teaches mobile phone has a housing having a long dimension that the rotary shape input device, said display, and said second input device are aligned substantially linearly along).

Regarding **claim 4**, Hong and Ballay disclose all the limitation, as discussed in claim 1. Furthermore, Hong further discloses that the rotary shape input device, said display, and said second input device are aligned substantially linearly (Fig. 4 and pages 1, paragraphs 25 – pages 2, paragraphs 31, where teaches mobile phone has a housing having a long dimension that the rotary shape input device, said display, and said second input device are aligned substantially linearly along).

Regarding **claim 5**, Hong and Ballay disclose all the limitation, as discussed in claim 1. Furthermore, Hong further discloses that the display is adjacent to said rotary shape input device and adjacent to said second input device such that said display is arranged substantially in-between said rotary input device and said input device (Fig. 4 and pages 1, paragraphs 25 – pages 2, paragraphs 31, where teaches mobile phone has a housing having a display device located between the rotary shape input device and the second input device).

Regarding **claim 6**, Hong discloses that the first input device is a keypad (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches the first input device number buttons).

Regarding **claim 7**, Hong discloses that the keypad includes a plurality of keys (71 in Fig. 4), wherein an outer set of keys of said plurality of keys include an arcade outer edge such that at least a portion of a perimeter of said keypad is in the shape of a circle (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches the first input device number buttons that a portion of a perimeter of the keypad in the shape of a circle).

Regarding **claim 15**, Hong discloses that a microphone disposed in said housing (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches the housing comprises microphone).

Regarding **claim 16**, Hong discloses that the microphone is disposed at an end of said housing distal from said speaker (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches the housing comprises microphone located in end of the housing).

Regarding **claim 17**, Hong discloses that the microphone is disposed in said housing substantially adjacent to said keypad (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches the housing comprises microphone located in end of the housing and neighboring to the keypad).

Regarding **claim 18**, Hong and Ballay disclose all the limitation, as discussed in claims 1 and 3. Furthermore, Hong further discloses that arranged horizontally, wherein information on said display, said first input device and said second input device are in a horizontal information orientation (Fig. 4 and pages 2, paragraphs 27 - 31, where teaches mobile phone has a housing having a short dimension that the rotary shape input device, said display, and said second input device are aligned substantially horizontally (could be used horizontally and this is well known art)).

Regarding **claim 19**, Hong and Ballay disclose all the limitation, as discussed in claims 1 and 3. Furthermore, Hong further discloses that information on said display, said first input device and said second input device are in a vertical information orientation (Fig. 4 and pages 1, paragraphs 25 – pages 2, paragraphs 31, where teaches mobile phone has a housing having a long dimension that the rotary shape input device, said display, and said second input device are aligned substantially linearly along).

Regarding **claim 20**, Hong and Ballay disclose all the limitation, as discussed in claims 1 and 18. Furthermore, Hong further discloses that a first input device (71 in Fig. 4) carried on said housing (50 in Fig. 4) adjacent to said keypad (Fig. 4) and at least partially circumscribing said keypad (Fig. 4 and pages 2, paragraphs 27 - 32, where teaches the housing having keypad and circumscribing said keypad). Hong teaches that an audio passage (speaker) carried on said housing adjacent to said second input device (Fig. 4 and pages 2, paragraphs 27 - 32, where teaches mobile phone has a housing including speaker located adjacent to the second input device). Hong teaches that a speaker carried in said housing and acoustically coupled to said audio passage (Fig. 4 and pages 2, paragraphs 27 - 32, where teaches mobile phone has a housing including speaker for outputting the audio that located adjacent to the second input device).

Regarding **claim 21**, Hong and Ballay disclose all the limitation, as discussed in claims 1 and 3.

Regarding **claim 22**, Hong and Ballay disclose all the limitation, as discussed in claims 1 and 15.

Regarding **claim 23**, Hong and Ballay disclose all the limitation, as discussed in claims 1 and 20.

Regarding **claim 24** Hong and Ballay disclose all the limitation, as discussed in claims 18 and 20.

Regarding **claim 25** Hong and Ballay disclose all the limitation, as discussed in claims 18 and 20. Furthermore, Hong further discloses that at least one button is readable in said horizontal configuration and said at least one button is readable in said vertical configuration (Fig. 4 and pages 2, paragraphs 27 - 32, where teaches the display may be provided with a touch panel to substitute for the button that user pushes the button for displaying multimedia services or variable service).

Regarding **claim 26**, Hong discloses that speaker is disposed in said input device (Fig. 4 and pages 2, paragraphs 27 – 32).

Regarding **claim 28** Hong and Ballay disclose all the limitation, as discussed in claims 1 and 20. Furthermore, Hong further discloses that an elongated housing having a front surface (Fig. 4), a first end (60 in Fig. 4) and a second end (70 in Fig. 4) (Fig. 4 and pages 2, paragraphs 27 – 32). Hong teaches that a controller (inherently mobile phone has it) carried in said housing (Fig. 4), said controller coupled to said transceiver (inherently mobile phone has controller coupled transceiver, well known art). Hong teaches that a multi-key keypad carried on said front surface of said elongated housing adjacent said first end of said housing (Fig. 4 and pages 2, paragraphs 27 – 32). Hong teaches that multi-key keypad coupled to said controller (Fig. 1 and pages 2, paragraphs 27 – 32). Hong teaches that a speaker port (Fig. 5) on said front surface of said housing (Fig. 4),

said speaker port adjacent said second end of said housing (Fig. 4 and pages 2, paragraphs 27 – 32). Hong teaches that a speaker navigation (audio line) input located at the speaker port, the speaker navigation input coupled to the controller (Fig. 4 and pages 2, paragraphs 27 – 32, this is well known art, inherently, mobile phone has same structure).

Hong does not specifically disclose the limitation “the rotating input coupled to said controller”. However, Ballay discloses the limitation “the rotating input coupled to said controller” (Fig. 5 and pages 5, paragraphs 78 – 80, where teaches the rotating input interfaces with controller for operating input). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Hong structure as taught by Ballay, provide the motivation to achieve an enhancing mobile service for efficient controlling input device in the wireless communication device.

Allowable Subject Matter

4. Claims 8-14 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose “rotary input device encompasses said plurality of keys, such that said outer set of said keys are adjacent to said rotary input device wherein said rotary input device rotates around said keypad, and the keypad rotates to a first keypad orientation when said apparatus is in said horizontal configuration, and wherein said keypad rotates to a second keypad orientation for said

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apparatus in said vertical configuration” as specified in the claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Finke-Anlauff (US 2002/0006815) discloses Foldable Keyboard for Mobile Communications Device.

Robbin et al. (US 2003/0095096) discloses Use of Rotational User Input.

Bonnelykke et al. (US 2004/0253931) discloses Rotator with Rim Select Functionality.

Information regarding...Patent Application Information Retrieval (PAIR) system... at 866-217-9197 (toll-free)."

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
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Or P.O. Box 1450
Alexandria VA 22313

or faxed (703) 308-9051, (for formal communications intended for entry)

Or: (703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to USPTO Headquarters, Alexandria, VA.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay Aung Maung**, can be reached on **(571) 272-7882**. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L
June 26, 2005

John J Lee


NAY MAUNG
SUPERVISORY PATENT EXAMINER